L35: Entry 3 of 10 File: USPT Mar 1, 2005

DOCUMENT-IDENTIFIER: US 6862609 B2
TITLE: Redundant storage for multiple processors in a ring network

Drawing Description Text (52):
FIG. 37 illustrates some of supported block sizes for Linux for various filesystem types.

Drawing Description Text (53):
FIG. 38 illustrates some of supported cluster sizes for Windows NT and 2000 for various filesystem types.

Drawing Description Text (56):
FIG. 40B depicts a read-ahead method using filesystem knowledge and read requests as input.

Detailed Description Text (36):
RNS DADS cabinets or DASD strings can also be used as large Network Attached Storage servers to provide Ethernet based storage area networks. An RNS can also be configured to host multiple NFS, NCP, SMBFS, or iSCSI clients via an Ethernet connection, as shown in FIGS. 11 and 12. In FIG. 11, DASD strings 1108, 1110, and 1112 are connected to an Ethernet network. As in FIG. 10, DASD strings 1108, 1110 and 1112 is composed of DASD cabinets labeled 1101. A client 1100 accesses the DASD strings through the NCP protocol. Another client 1102 accesses the DASD string through the NFS protocol. A third client 1104 accesses the DASD strings through the iSCSI protocol. A fourth client 1105 accesses the DASD strings through the NCP, NFS, and iSCSI protocols. In FIG. 12, a DASD string 1208 (again, composed of DASD cabinets labeled 1201) is made available through Ethernet connections 1200, 1202, 1204, and 1206 to a client. The first connection 1200 accesses the string 1208 using the iSCSI protocol, the storage being accessible under/dev/sda and /dev/sdb. The second connection 1202 accesses the string 1208 using the NCP protocol, the storage being accessible under SYS:/ and VOL1:/. The third connection 1204 accesses the string 1208 using the NFS protocol, the storage being accessible under /mnt/remote. The fourth connection 1206 also accesses the string 1208 using the NFS protocol, the storage being accessible under /mnt/remote1.

Detailed Description Text (69):
The hotfix redirection data area is a large table of free sectors that is used to redirect read and write data to known good sectors. The hotfixing subsystem is self-healing and self-describing. This means that if the hotfix table is attempting to write to itself, and gets a read or write error, it has the capability of hotfixing the hotfix table, and creating self-describing entries that allow it to re-map its own sectors in the hotfix data area.

Detailed Description Text (114):
The SISCI virtual device mapping module creates virtual disk objects and exports them to SCI attached hosts devices. The mirroring, hotfixing, and segment journaling is implemented in the mirroring subsystem modules (M2CS and NWVP). The configuration monitor daemon provides TCP service ports that can be used to configure an RNS array over Ethernet via telnet or the RNS configuration utility. The HSM data mining daemon creates "ghost mirrors" in user space of virtual disks

for dynamic device reconstruction and also performs array reconstruction from disk segment cache and tape archives for disaster recovery. This daemon provides HSM specific TCP service ports that allow data mining operations to be performed remotely from either an SCI interconnect or an Ethernet network. The HSM daemon is the server side component of the HSM management and configuration console.

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L35: Entry 4 of 10 File: USPT Sep 21, 2004

DOCUMENT-IDENTIFIER: US 6795895 B2
TITLE: Dual axis RAID systems for enhanced bandwidth and reliability

Drawing Description Text (52):
FIG. 37 illustrates some of supported block sizes for Linux for various filesystem types.

Drawing Description Text (53):
FIG. 38 illustrates some of supported cluster sizes for Windows NT and 2000 for various filesystem types.

Drawing Description Text (56):
FIG. 40B depicts a read-ahead method using filesystem knowledge and read requests as input.

Detailed Description Text (36):
RNS DADS cabinets or DASD strings can also be used as large Network Attached Storage servers to provide Ethernet based storage area networks. An RNS can also be configured to host multiple NFS, NCP, SMBFS, or iSCSI clients via an Ethernet connection, as shown in FIGS. 11 and 12. In FIG. 11, DASD strings 1108, 1110, and 1112 are connected to an Ethernet network. As in FIG. 10, DASA strings 1108, 1110 and 1112 is composed of DASD cabinets labeled 1101. A client 1100 accesses the DASD strings through the NCP protocol. Another client 1102 accesses the DASD string through the NFS protocol. A third client 1104 accesses the DASD strings through the iSCSI protocol. A fourth client 1105 accesses the DASD strings through the NCP, NFS, and iSCSI protocols. In FIG. 12, a DASD string 1208 (again, composed of DASD cabinets labeled 1201 is made available through Ethernet connections 1200, 1202, 1204, and 1206 to a client. The first connection 1200 accesses the string 1208 using the iSCSI protocol, the storage being accessible under /dev/sda and /dev/sdb. The second connection 1202 accesses the string 1208 using the NCP protocol, the storage being accessible under SYS:/ and VOL1:/. The third connection 1204 accesses the string 1208 using the NFS protocol, the storage being accessible under /mnt/remote. The fourth connection 1206 also accesses the string 1208 using the NFS protocol, the storage being accessible under /mnt/remote1.

Detailed Description Text (69):
The hotfix redirection data area is a large table of free sectors that is used to redirect read and write data to known good sectors. The hotfixing subsystem is self-healing and self-describing. This means that if the hotfix table is attempting to write to itself, and gets a read or write error, it has the capability of hotfixing the hotfix table, and creating self-describing entries that allow it to re-map its own sectors in the hotfix data area.

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for dynamic device reconstruction and also performs array reconstruction from disk segment cache and tape archives for disaster recovery. This daemon provides HSM specific TCP service ports that allow data mining operations to be performed remotely from either an SCI interconnect or an Ethernet network. The HSM daemon is the server side component of the HSM management and configuration console.

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Freeform Search

Database:
- US Pre-Grant Publication Full-Text Database
- **US Patents Full-Text Database**
- US OCR Full-Text Database
- EPO Abstracts Database
- JPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

Term: L32 and SERVER

Display: 50 **Documents in Display Format:** FRO **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Side by Side ○ Image

Search Clear Interrupt

Search History

DATE: Monday, November 28, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT; PLUR=YES; OP=OR			
L35	L32 and SERVER	10	L35
L34	L33 AND SERVER	0	L34
L33	L32 and SAN	0	L33
L32	("self-describing") and (filesystem)	10	L32
L31	(self near describing) same (filesystem)	0	L31
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L30	l29 and server	2	L30
L29	6493804.pn.	2	L29
L28	20040236745.pn.	2	L28
L27	L25 and filesystem	2	L27
L26	L25 and filesystem	2	L26
L25	formal near description	650	L25
L24	(filesystem near description)	2	L24
DB=USPT; PLUR=YES; OP=OR			
L23	(filesystem near description)	1	L23
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			

L22	client and (filesystem near description)	2	L22
L21	L20 and (filesystem near description)	1	L21
L20	client near filesystem	52	L20
DB=USPT; PLUR=YES; OP=OR			
L19	description near filesystem	1	L19
L18	(description) and filesystem	585	L18
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L17	(formal near description) and filesystem	2	L17
L16	L15 and (formal near description)	0	L16
L15	client near "file system"	669	L15
L14	client near filesystem	52	L14
L13	L12 and (access near storage)	7	L13
L12	(formal near description) and ((file near system) or filesystem)	68	L12
L11	L10 and (script near function)	2	L11
L10	L9 and (web near page$)	15	L10
L9	L7 and (menu$)	18	L9
L8	L7 and (menu near table)	0	L8
L7	L3 and (file near script$)	21	L7
L6	L5 and (file near script$)	0	L6
L5	L3 and (menu near table)	2	L5
L4	L3 and (menu near highlighted near item)	2	L4
L3	L2 and (highlighted near text)	383	L3
L2	715/$.ccls.	23325	L2
L1	menu near spacer near function	0	L1

END OF SEARCH HISTORY

Freeform Search

Database: US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term: 129 and server

Display: 50 **Documents in Display Format:** - **Starting with Number** 1

Generate: ○ Hit List ◉ Hit Count ○ Side by Side ○ Image

Search Clear Interrupt

Search History

DATE: Monday, November 28, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L30	l29 and server	2	L30
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DB=USPT; PLUR=YES; OP=OR			
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L22	client and (filesystem near description)	2	L22
L21	L20 and (filesystem near description)	1	L21
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DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L17	(formal near description) and filesystem	2	L17
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L8	L7 and (menu near table)	0	L8
L7	L3 and (file near script$)	21	L7
L6	L5 and (file near script$)	0	L6
L5	L3 and (menu near table)	2	L5
L4	L3 and (menu near highlighted near item)	2	L4
L3	L2 and (highlighted near text)	383	L3
L2	715/$.ccls.	23325	L2
L1	menu near spacer near function	0	L1

END OF SEARCH HISTORY

Hit List

First Hit | Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 2 of 2 returned.

☐ 1. Document ID: US 6493804 B1

Using default format because multiple data bases are involved.

L30: Entry 1 of 2 File: USPT Dec 10, 2002

US-PAT-NO: 6493804
DOCUMENT-IDENTIFIER: US 6493804 B1

TITLE: Global file system and data storage device locks

DATE-ISSUED: December 10, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Soltis; Steven R.	Rochester	MN		
O'Keefe; Matthew T.	Plymouth	MN		
Ruwart; Thomas M.	Fridley	MN		
Houlder; Gerald A.	Bloomington	MN		
Coomes; James A.	White Bear Lake	MN		
Miller; Michael H.	Eden Prairie	MN		
Soltis; Edward A.	Elk River	MN		
Gilson; Raymond W.	St. Paul	MN		
Preslan; Kenneth W.	Minneapolis	MN		

US-CL-CURRENT: 711/152; 707/10, 707/9, 711/153

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 2. Document ID: US 6493804 B1

L30: Entry 2 of 2 File: DWPI Dec 10, 2002

DERWENT-ACC-NO: 2003-327427
DERWENT-WEEK: 200331

TITLE: Data storage device in networked computer system, includes locking mechanism which controls access to particular storage block, based on control signals received from distributed computer system

INVENTOR: COOMES, J A; GILSON, R W ; HOULDER, G A ; MILLER, M H ; O'KEEFE, M T ; PRESLAN, K W ; RUWART, T M ; SOLTIS, E A ; SOLTIS, S R

PRIORITY-DATA: 1997US-061028P (October 1, 1997), 1998US-0164957 (October 1, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6493804 B1	December 10, 2002		037	G06F012/00

INT-CL (IPC): G06 F 12/00

ABSTRACTED-PUB-NO: US 6493804B
BASIC-ABSTRACT:

NOVELTY - A locking mechanism controls access to particular storage block provided on storage device, based on control signals received through communication interface from the distributed computer system residing on both the remote processing clients.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) distributed computer system;

(2) method of using distributed computer system; and

(3) computer-readable medium having instructions to use distributed computer system.

USE - For managing shared data storage on networked computer system.

ADVANTAGE - Maintains data consistency when storage contents are shared by multiple clients. Allows the use of serverless distributed architecture global file system to access content from storage device. Allows high speed data transfer across the network and eliminates risk of server failures, reduces system cost and complexity. There is no need of communication between clients to arbitrate for the shared resources. The client's failure due to direct attachment of shared storage device to the client, is avoided. Minimizes overhead steps for transferring data from shared storage device.

DESCRIPTION OF DRAWING(S) - The figure shows the table illustrating sequence of events undertaken by clients in accessing shared data.

Term	Documents
SERVER	362825
SERVERS	99062
(29 AND SERVER).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2
(L29 AND SERVER).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	2

First Hit Fwd Refs Previous Doc Next Doc Go to Doc#
End of Result Set

Generate Collection Print

L17: Entry 2 of 2 File: USPT May 15, 2001

DOCUMENT-IDENTIFIER: US 6233576 B1
TITLE: Enhanced security for computer system resources with a resource access authorization control facility that creates files and provides increased granularity of resource permission

Brief Summary Text (23):
4. It is not easy to define a formal description of the global security system, suitable for its rigorous analysis; and

Detailed Description Text (107):
Once again, this arrangement is suitable for operating systems such as IBM's AIX operating system which use the /var filesystem to hold data files related to installed products.

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Display Format: - Change Format

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